Over the last decade substantial progress has been made in understanding the role of descending projections that evoke and control ongoing locomotion. Building on this work, we are exploring A11 neurons in the diencephalon and A13 neurons in the zona incerta that contain dopaminergic neurons that project to the spinal cord and brainstem. Here we show that photostimulation of the A11 and A13 nuclei can evoke locomotor activity in mice. We present evidence that the A11 projects to the Medullary Reticular Formation (MRF), while the A13 projects to both the Mesencephalic Locomotor Region (MLR) and the MRF. In addition, both the A11 and the A13 project fibres to the thoracolumbar spinal cord. These data suggest an expanded view of the role of these areas in locomotion beyond the well-known nigrostriatal pathway.

Note:
Prévi d'avis ser vos étudiants gradués et stagiaires postdoctoraux afin d'avoir la participation de tous.